

lower incidence of short staffing affecting their ability to meet their patients' needs than is true for RNs with patient loads greater than 6.

Table 8. Relationship between daily patient load and short staffing events for RN staff nurses employed in hospital in-patient units

| Daily Patient Load: | Less than or Equal to 6 Patients Daily | More than 6 Patients Daily |
|---------------------------|---|-------------------------------|
| Short Staffing Frequency: | N = 101 | N = 81 |
| Never | 13.9 | 7.4 |
| 1 – 2 times | 27.7 | 13.6 |
| 3 – 5 times | 15.8 | 19.7 |
| Weekly | 32.7 | 33.3 |
| Daily | 9.9 | 25.9 |
| Percent Totals | 100% | 99.9% |
| χ^2 p-value | 0.0109 | |

To test the relationship between average daily patient load and short staffing more directly, we used Pearson correlations to assess the presence and strength of a linear association. This approach differs significantly from analyzing the distribution of a group of respondents across a set of categories (as in Table 8). A correlation examines the relationship between two variables on a case by case basis and then summarizes the findings.

When examined by setting type, we found a moderate, positive association between patient load and the frequency of short staffing for RNs in community settings ($r^2 = 0.25$, p-value = 0.01) and for RNs employed in hospital in-patient units ($r^2 = 0.20$, p-value = 0.009). That is, those with higher daily patient loads also tended to be the ones that reported more frequent impacts of short staffing on their ability to care for patients. This linear relationship was not found for RNs in long term care settings, or for LPNs in any of the three general setting types.

To investigate further, Pearson correlations were run on patient load and short staffing frequency for hospital RNs and LPNs within their unit type, and for RNs and LPNs in community settings by their facility type. Results revealed several statistically significant associations, some of them quite strong:

- Both RNs and LPNs practicing on med/surg units showed a moderately strong and positive association between their average daily patient load and the frequency of short staffing ($r^2 = 0.44$ for both groups, p-value for RNs = 0.0057 and for LPNs = 0.0482).
- RNs on neonatal units showed a strong association ($r^2 = 0.68$, p-value = 0.0111).